

**REMARKS**

Claims 1-38 are pending in the current application, with claims 24 and 34 being withdrawn. Claims 1-23, 25-27, 32, and 35-38 currently stand rejected. The Examiner notes allowable subject matter in claims 28-31 and 33. Applicants respectfully submit that, in light of the following remarks, the remaining claims are also allowable.

**Claim Rejections – 35 U.S.C. § 112**

Claims 1-23, 25-27, 32, and 35-38 stand rejected under 35 U.S.C. § 112, ¶¶ 1 & 2 as lacking enablement and for being indefinite. Particularly, the Examiner alleges that the amended claim term “repeatedly recording about 1000 or more two-dimensional digital images” lacks support in the specification as filed. Initially, Applicants admit some confusion as to how support in the original specification alone is indicative of an enablement or definiteness deficiency, as these provisions require that a person skilled in the art be able to practice and understand the claim terms based on the specification *and their knowledge in the art*. See MPEP §§ 2164 & 2173. Should the Examiner have intended to reject the claims for lack of written description, Applicants respectfully request a new, non-final office action setting out that rejection such that Applicants may properly respond to the Examiners’ rationale for so rejecting the claims. Applicants respectfully traverse the enablement and indefiniteness rejections for the reasons detailed below.

Applicants respectfully submit that the claim term "repeatedly recording about 1000 or more two-dimensional digital images" is described in the original specification and is enabled and definite. The Examiner is directed to paragraph [0042] of the specification as published (page 13, lines 2-4 of the specification as filed) for a description of recording thousands of digital images. In light of these teachings in the specification and the knowledge of a person skilled in the art, the claim term "repeatedly recording about 1000 or more two-dimensional digital images" is definite and enabled. If the Examiner is of a different opinion, Applicants respectfully request that the Examiner set out a rationale as to why a person knowledgeable in the art, upon reading the specification, would not be able to repeatedly record about 1000 or more 2-D digital images or would not understand what it means to do so. See MPEP §§ 2164.04 (In issuing a rejection under § 112, first paragraph for lack of enablement "the minimal requirement is for the examiner to give reasons for the uncertainty of the enablement").

Because a person skilled in the art would be able to ascertain the claims' meanings and practice the same, the claims are definite and enabled. Withdrawal of the rejection to claims 1-23, 25-27, 32, and 35-38 under 35 U.S.C. § 112, ¶¶ 1 & 2 is respectfully requested.

Claim Rejections – 35 U.S.C. § 103

Claims 1-6, 8-10, 13 and 15-23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over US Pat 6,694,830 to Hakes ("Hakes") in view of US

Pat 6,731,100 to Hansen et al. ("Hansen"). Applicants respectfully traverse this rejection for the reasons detailed below.

The Examiner maintains the rejection to claims 1 and 18, admitting that the applied references do not teach "recording about 1000 or more two-dimensional digital images" of illuminated milk by the recited apparatuses and methods. The Examiner alleges that the use of about 1000 or more images is nothing more than discovery of an optimum or workable range from the general conditions disclosed in Hansen. Applicants respectfully submit that Hansen's disclosure of a **maximum of 4 digital images** is not within a general condition for **about 1000 or more digital images**. See Hansen, Col. 5, ll. 53-58. Cases and guidance in the MPEP discussing discovery of optimum ranges rely on applications claiming values wholly encompassing or **within an order of magnitude** of the values in the applied art. See MPEP § 2144.05(II). The values of 4 and 1000 are **over two orders of magnitude apart**. Thus, Hansen does not disclose the general conditions that may be optimized under relevant § 103 standards.

Worse, even if Hansen and the claimed values were anywhere near a shared general condition, Hansen explicitly teaches away from the claimed range. See Hansen, Col. 5, ll. 53-58 ("in some cases just a few exposures such as two, three, or four exposures, **but the by far preferred embodiment is to use just one exposure**"). Teaching away rebuts any *prima facie* case of obviousness by optimality. See MPEP 2144.05(III) ("Applicant can rebut a presumption of obviousness based on a claimed invention that falls within a

prior art range by showing that the prior art taught away from the claimed invention"). Thus, Hansen teaches away from the claimed ranges and cannot be used in a rejection under § 103 to the same.

Hakes does not cure the disclosure and suggestion deficiencies of Hansen discussed above. Specifically, Hakes is silent with regard to digital images entirely, let alone a number to be recorded. Because Hansen and Hakes, alone or in combination, fail to teach each and every element of claims 1 and 18, Hansen and Hakes cannot anticipate or render obvious claims 1 and 18. Claims 2-6, 8-10, 13, 15-17, and 19-23 are allowable at least for depending from an allowable base claim. Withdrawal of the rejection under § 103(a) to claims 1-6, 8-10, 13 and 15-23 is respectfully requested.

Claims 11, 12, 14, 25-27, and 32 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hakes in view of Hansen as applied above and further in view of US Pat 3,367,416 to Van Der Lely et al. ("Van Der Lely"). Applicants respectfully traverse this rejection for the reasons detailed below.

Van Der Lely does not cure, nor does the Examiner apply Van Der Lely for curing, the disclosure deficiencies of Hakes and Hansen discussed above with regard to claims 1 and 18. Because Hakes, alone or in combination with Hansen and Van Der Lely, fails to teach or suggest each and every element of the claims, these references cannot anticipate or render obvious claims 1 and 18. Claims 11, 12, 14, 25-27, and 32 are allowable at least for depending from

an allowable base claim. Withdrawal of the rejection to claims 11, 12, 14, 25-27, and 32 under § 103(a) is respectfully requested.

**CONCLUSION**

Accordingly, in view of the above remarks, reconsideration of the objections and rejections and allowance of each of claims 1-38 in connection with the present application is earnestly solicited.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant(s) hereby petition(s) for a one (1) month extension of time for filing a reply to the outstanding Office Action and submit the required \$130.00 extension fee herewith.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact John A. Castellano at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY, & PIERCE, P.L.C.

By \_\_\_\_\_

John A. Castellano, Reg. No. 35,094  
P.O. Box 8910  
Reston, Virginia 20195  
(703) 868-8000

JAC / REA : tlt